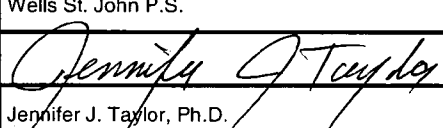


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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/549,401	
	Filing Date	September 13, 2005	
	First Named Inventor	Brian J. Daniels	
	Art Unit	Unknown	
	Examiner Name	Unknown	
Total Number of Pages in This Submission		Attorney Docket Number	H0006041.70974-US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 2 Return Receipt Postcards; Copy of 48 cited references
Remarks		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	Wells St. John P.S.	
Signature		
Printed name	Jennifer J. Taylor, Ph.D.	
Date	June 12, 2006	Reg. No. 48,711

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EV850819276

Inventor: Brian J. Daniels et al.

Title: Copper-Containing PVD Targets and Methods for Their Manufacture

Assignee: Honeywell International Inc.

INFORMATION DISCLOSURE STATEMENT

References – See Attached Form PTO-1449

The attached form PTO-1449 is submitted in compliance with 37 CFR §1.56. No admission is made regarding whether any of the submitted references is prior art. Copies of the references are attached.

Respectfully submitted,

Dated: June 12, 2006

By: Jennifer J. Taylor
Jennifer J. Taylor, Ph.D.
Reg. No. 48,711

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. H0006041.70974 US	SERIAL NO. 10/549,401		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Brian J. Daniels et al.			
				FILING DATE September 13, 2005	GROUP Unknown 1793		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate
/S.I./	AA	3,963,934	06-1976	Ormrod			
/S.I./	AB	4,132,614	01-1979	Cuomo et al.			
/S.I./	AC	4,149,907	04-1979	Wronski et al.			
/S.I./	AD	4,159,909	07-1979	Wilson			
/S.I./	AE	4,198,283	04-1980	Class et al.			
/S.I./	AF	4,209,375	06-1980	Gates et al.			
/S.I./	AG	4,385,979	05-1983	Pierce et al.			
/S.I./	AH	4,545,882	10-1985	McKelvey			
/S.I./	AI	4,629,859	12-1986	Reddy			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-class	Translation
							Yes No
/S.I./	AM	0335383 A2	10-1989	EPO			
/S.I./	AN	0626722 A1	11-1994	EPO			
/S.I./	AO	85104006 A	10-1986	CN			
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
/S.I./	AR		Lucke, K. et al., "Physical Metallurgy Principles" 2nd ed., 1973, p. 298.				
/S.I./	AS		Phillips, V.A. et al., "The Effect of Certain Solute Elements on the Recrystallization of Copper", Journ. of Institute of Metals, Vol. 81, 1952-53, pp. 185-208.				
/S.I./	AT		Brizzolara et al., "Low Energy Sputtering of Eutectic Ag/Cu Alloys", Nuclear Instruments and Methods in Physics Research B26, 1987, pp. 528-531.				
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<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

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U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate
/S.I./	AA	5,242,566	09-1993	Parker			
/S.I./	AB	5,268,236	12-1993	Dumont et al.			
/S.I./	AC	5,282,943	02-1994	Lannutti et al.			
/S.I./	AD	5,282,946	02-1994	Kinoshita et al.			
/S.I./	AE	5,336,386	08-1994	Marx et al.			
/S.I./	AF	5,397,050	03-1995	Mueller			
/S.I./	AG	4,189,084	02-1980	Johnson et al.			
/S.I./	AH	5,490,914	02-1996	Hurwitt et al.			

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/S.I./	AM	02301585	12/13/90	Japan				
/S.I./	AN	05078195	3/30/93	Japan				
/S.I./	AO	06081138	01/03/94	Japan				
/S.I./	AP	09249967	09/22/97	Japan				
/S.I./	AQ	10287939	10/27/98	Japan				

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/S.I./	AR		Cabral, C. et al., "Preparation of Low Resistivity Cu-1 at. %Cr Thin Films by Magnetron Sputtering", J. Vac. Sci. Technol. A 10(4), Jul/Aug 1992, pp. 1706-1711.
/S.I./	AS		Foster, N., "Composition and Structure of Sputtered Films of Ferroelectric Niobates", J. of Vac. Sci. and Tech., Vol. 8, No. 1, (1971), pp. 251-255.
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/S.I./	AA	6,010,583	01/00	Annavarapu et al.			
/S.I./	AB	6,028,003	02/00	Frisa et al.			
/S.I./	AC	6,039,855	03/00	Wollenberg			
/S.I./	AD	6,042,752	03/00	Mitsui			
/S.I./	AE	6,068,742	05/00	Daxinger et al.			
/S.I./	AF	6,086,735	07/00	Gilman et al.			
/S.I./	AG	5,972,192	10-1999	Dubin et al.			
/S.I./	AH	4,786,469	11-1988	Weber et al.			
/S.I./	AI	5,312,790	5-1994	Sengupta et al.			
/S.I./	AJ	6,093,966	07-2000	Venkatraman et al.			

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/S.I./	AM	61084389	4/28/86	Japan				
/S.I./	AN	61113740	5/31/86	Japan				
/S.I./	AO	62127438	6/9/87	Japan				

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/S.I./	AR		Harper, J. et al., "Materials Issues in Copper Interconnections", MRS Bulletin, Aug. 1994, pp. 23-29.
/S.I./	AS		Igarashi, Y. et al., "Electromigration Properties of Copper-Zirconium Alloy Interconnects", J. Vac. Sci. Technol. B 16(5), Sep/Oct. 1998, pp. 2745-2750.
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*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate	
/S.I./	AA	4,676,827	06-1987	Hosoda et al.				
/S.I./	AB	4,814,053	03-1989	Shimokawato				
/S.I./	AC	4,986,856	01-1991	Tanigawa et al.				
/S.I./	AD	5,023,698	06-1991	Kobayashi et al.				
/S.I./	AE	5,066,617	11-1991	Tanemoto et al.				
/S.I./	AF	5,077,005	12-1991	Kato				
/S.I./	AG	5,314,651	05-1994	Kulwicki				
/S.I./	AH	5,719,447	02-1998	Gardner				
/S.I./	AI	5,833,820	11-1998	Dubin				
/S.I./	AJ	5,435,826	07-1995	Sakakibara et al.				
/S.I./	AK	5,895,562	04-1999	Dubin				
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/S.I./	AM	63235442	9/30/88	Japan				
/S.I./	AN	363033174	02/12/88	Japan				
/S.I./	AO	WO 00/73531 A2	12/7/00	PCT				
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/S.I./	AR		Massalski, T., "Binary Alloy Phase Diagrams", Vol. 1, American Society for Metals, Ohio 1986, pp. 18-19, 928-929, 936-937, 964-965.					
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U.S. PATENT DOCUMENTS								
*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate	
/S.I./	AA	6,117,281	09-2000	Novbakhtian				
/S.I./	AB	6,117,781	09-2000	Lukanc et al.				
/S.I./	AC	6,117,782	09-2000	Lukanc et al.				
/S.I./	AD	6,121,150	09-2000	Avanzino et al.				
/S.I./	AE	6,121,685	09-2000	Gardner				
/S.I./	AF	6,162,726	12-2000	Dubin				
/S.I./	AG	6,197,433	03-2001	Hatano				
/S.I./	AH	5,486,491	01-1996	Sengupta et al.				
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/S.I./	AK	6,478,902	11-2002	Koenigsmann et al.				
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/S.I./	AM	63064211	3/22/88	Japan				
/S.I./	AN	63118033	5/23/88	Japan				
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
/S.I./	AR		Rossnagel, S., "Direction and Preferential Sputtering-Based Physical Vapor Deposition", Thin Solid Films 263 (1995), pp. 1-12.					
/S.I./	AS		Takewaki, T. et al., "Excellent Electro/Stress-Migration-Resistance Surface-Silicide Passivated Giant-Grain Cu-Mg Alloy Interconnect Technology for Giga Scale Integrations (GSI)", 1995 IEEE, pp. 10.5.1 - 10.5.4.					
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/S.I./	AA	4,814,053	03-1989	Shimokawato			
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/S.I./	AC	5,215,639	06-1993	Boys			
/S.I./	AD	5,589,040	12-1996	Nishimura			
/S.I./	AE	5,674,367	10-1997	Hunt et al.			
/S.I./	AF	5,772,858	06-1998	Tepman			
/S.I./	AG	5,833,823	11-1998	Gruenenfelder et al.			
/S.I./	AH	6,579,467	06-2003	Li et al.			
/S.I./	AI	6,451,222	09-2002	Li et al.			
/S.I./	AJ	5,846,389	12-1998	Levine et al.			
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/S.I./	AM	01096374	04-1989	Japan			
/S.I./	AN	01096376	10-1987	Japan			
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/S.I./	AR		Haertling, G., "Hot-Pressed Ferroelectric Lead Zirconate Titanate Ceramics for Electro-Optical Applications", Ceramic Bulletin, Vol. 49, No. 6 (1970), pp. 564-567.				
/S.I./	AS		Dierckxsens et al., "Effect of Trace Elements On the Recrystallization Behavior of High Purity Oxygen-Containing Copper", Erzmetall, (1975), 28(11), 496-500 (abstract only)				
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/S.I./	AA	6,440,243	08-2002	Tan et al.			
/S.I./	AB	6,139,701	10-2000	Pavate et al.			
/S.I./	AC	5,693,203	12-1997	Ohhashi et al.			
/S.I./	AD	6,113,761	09-2000	Kardokus et al.			
/S.I./	AE	3,666,666	05-1972	Haertling			
/S.I./	AF	3,923,675	12-1975	Mazdiyasni et al.			
/S.I./	AG	6,277,254	08-2001	Tan et al.			
/S.I./	AH	4,311,522	01-1982	Batra et al.			
/S.I./	AI	6,238,494	05-2001	Segal			
/S.I./	AJ	3,766,642	10-1973	Schlaudt et al.			

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Document Number	Date	Country	Class	Sub-class	Translation		
					Yes	No	
/S.I./	AM	62036798 B4	08-1987	JP			
/S.I./	AN	61227972 A2	10-1986	JP			

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)		
/S.I./	AR	Pierson, K. et al., "Total Sputtering Yield of Ag/Cu Alloys for Low Energy Argon Ions", Nucl. Instrum. Methods Phys. Res., Sect. B (1996), Vol. 108(3), pp. 290-299.
/S.I./	AS	West, C., "International Critical Tables of Numerical Data, Physics, Chemistry and Technology", National Research Council of the USA, McGraw-Hill Book Co., Inc. 1933, 6 pages.
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/S.I./	AA	6,165,607	12-2000	Yamanobe et al.			
/S.I./	AB	6,645,427	11-2003	Kardokus et al.			
/S.I./	AC	6,331,234	12-2001	Kardokus et al.			
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/S.I./	AE	49007777 B4	02-1974	JP				
/S.I./	AF	11323539	11-1999	JP				
/S.I./	AG	0441408 A2	08-1991	EPO				
/S.I./	AH	1026284 A1	08-2000	EPO				
/S.I./	AI	2000239836 A	09-2000	JP				
/S.I./	AJ	62116743 A2	05-1987	JP				
/S.I./	AK	11204524	07-1999	JP				
/S.I./	AL	57056215 B4	11-1982	JP				
/S.I./	AM	50077216 A2	06-1975	JP				
/S.I./	AN	57145954 A2	09-1982	JP				
/S.I./	AO	61084389 A2	04-1986	JP				

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/S.I./	AR		Yeon et al., "Electrical Characteristics of the MOD-derived SrBi ₂ xTa ₂ O ₉ and SrBi _{2.4} (TA,Nb) ₂ O ₉ Thin Films", Journal of Materials Science, 35(10), pgs. 2405-2411, May 15, 2000. Abstract only.
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	AD						

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	AE							
	AF							
	AG							
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	AI							
	AJ							
	AK							
	AL							
	AM							

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/S.I./	AN		Reda et al., "Amorphous copper-silver films with high stability", Int. Cent. Theor. Phys., Trieste, Italy, 1983. (Abstract only) The year is sufficiently early so that the month is not in issue.
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